

## **THE INTERNATIONAL MONETARY SYSTEM: FORTY YEARS AFTER BRETTON WOODS**

### **Review Essay\***

Charles ENGEL

*University of Virginia, Charlottesville, VA 22901, USA*

In May 1984 a distinguished group of central bankers and economists gathered for a conference at Bretton Woods to consider the evolution of the world monetary system that was born at that location forty years earlier. This volume contains nine essays, with accompanying discussion, on issues of performance and reform of current international monetary arrangements. These papers deal with problems facing the industrialized and the less-developed countries, and assess the institutions that have been set up to accommodate these problems.

The major accomplishments of the original Bretton Woods Conference were, of course, the establishment of the system of payments based on fixed exchange rates and the organization of the World Bank and the International Monetary Fund. As the order developed in the late 40's and early 50's, each central bank saw it as its duty to intervene in foreign exchange markets to ensure an essentially fixed parity of their currency with respect to the dollar. The role of the U.S. was to guarantee the dollar price of gold at \$35 an ounce.

The system has been called a 'dollar standard' because the dollar played the role of a reserve currency. One of the paradoxes of the system, as Robert Triffin pointed out in the early 60's, is that in order to produce a continuing and rapid enough expansion of world reserves, the U.S. had to run balance of payments deficits, yet continued deficits by the U.S. threatened the convertibility of the dollar into gold.

As it happened, the system of fixed parities broke down in the early 70's not because of a lack of reserves, but because a glut of dollars made the Bretton Woods dollar exchange rates untenable. The system eventually evolved into one in which most of the industrialized countries' currencies more or less are determined by the market, while the currencies of most second and third world countries are pegged to a major currency. The floating period has been

\*This is a review of *The International Monetary System: Forty Years After Bretton Woods*, Federal Reserve Board of Boston, Conference Series No. 28, 1984.

characterized by great fluctuations in exchange rates over short periods of time. In addition, international financial markets have in recent years been beset with the dilemma of rising foreign debt in many Latin American countries with a threat of possible default on billions of dollars of loans.

In a sense, each of the three crises – the breakdown of fixed parities, the wide changes in exchange rates in the flexible period, and the Latin American debt predicament – could not have occurred without the much greater openness of international financial markets that has evolved since 1944. The most significant developments over the last forty years in the international financial system have been the efforts to reduce capital controls and the development of international capital markets (such as Eurocurrency markets). The immediate source of the demise of the fixed rate system was the massive speculation against the dollar in 1971 and again in 1973. There seems to be wide agreement that the culprit behind the great variations in exchange rates in the 70's and 80's has been international capital flows. The level of borrowing by LDC's was never a concern until the 1970's when the recycled 'petrodollars' began to find their way in increasing numbers into the hands of the industrializing nations. If the original plan of the Bretton Woods Conference of 1944 failed, its demise can be blamed at least in part on the vastly changed circumstances that the international payments system had to accommodate in the 1970's.

Many of the papers of this volume are concerned with the problem of fluctuating exchange rates and policies aimed at dampening the flux. Robert Aliber, in his comments on the essay of Henry Wallich, suggests that there are basically four policies that can combat the excessive volatility of exchange rates caused by capital movements: (1) a return to some form of pegged exchange rates, (2) official intervention in foreign exchange markets to keep exchange rates within some band, (3) coordination of macroeconomic policies, and (4) capital controls. To these four options may be added a fifth suggested by Richard Cooper – the establishment of a single world currency. It is useful to take up each of these prescriptions in turn. First, though, we must ask why a volatile exchange rate is undesirable.

It would be generally incorrect to state that the problem lies in the increased uncertainty faced by individuals in international goods markets. The same financial innovations that are blamed for bringing about increased variability in currency prices by lowering the costs of exchange market speculation have provided means by which much exchange risk can be hedged. An American firm that agrees to buy German goods six months from now at a set mark price can eliminate all exchange risk through forward purchases of marks. As Anthony Solomon points out, in his remarks on Cooper's contribution, the volume of international trade dropped dramatically in the 1930's – 'from almost \$3 billion per month in January 1929 to less than \$1 billion in 1933' – when exchange rate volatility increased but forward markets were not

well developed. This contrasts to the experience of the 70's and 80's, in which the volume of trade has grown steadily.

The problem instead arises when changes in exchange rates lead to patterns of relative goods prices that do not reflect underlying resource costs. The central dilemma is that goods markets do not clear as fast as financial markets, so that goods prices do not respond as rapidly as exchange rates. It is unlikely that one can explain much of the drop in the relative price of a bottle of French wine to a bottle of Californian wine since 1980 by appealing to arguments about cost-saving production improvements in France or changes in taste in favor of California wines. From a viewpoint of economic efficiency it would seem that the shift in wine output toward France is costly for the world as a whole.

This problem is not unique to flexible exchange rate systems. The problem lies with sticky goods prices and these can be just as sticky in a system of fixed exchange rates. However, some support for the proposition that relative price variations that do not reflect underlying taste or cost changes are not so large under fixed exchange rates might be gleaned from Genberg's (1978) conclusion that purchasing power parity holds more nearly in fixed exchange rate regimes (although there are other potential explanations of his results).

Several of the authors in this volume believe that a move back to fixed rates is infeasible. Edward Bernstein traces the rise in foreign capital transactions and concludes: 'No system of fixed parities can function with such a pattern of international payments.' Although he notes the problems caused by the recent appreciation of the dollar, he concludes: 'It has not been accompanied by an exchange crisis, or worse, that would have been unavoidable with fixed par values.' Anthony Solomon states: 'But the problem of capital flows is now even more severe. The sheer size of international financial markets, their greater integration with national financial markets and the more aggressive and innovative management of money make the chances of a fixed exchange rate system working pretty low.' According to Cooper: 'An attempt to maintain fixed but adjustable exchange rates would almost certainly have required a much higher degree of controls over not only capital but also current transactions than in fact prevailed. Thus exchange rate flexibility helped to preserve a relatively open trading and financial system.' Otmar Emminger believes that fixed rates, at least for the dollar, would be impossible: 'The chief reason is the enormous amount of highly liquid and volatile dollar holdings in the world, which would quickly topple any fixed dollar rate and derail even a mere target zone arrangement as soon as economic and financial uncertainties arise or psychological or political accidents occur. Floating is the only available protection against large volatile money flows.'

The high degree of capital mobility and asset substitutability would seem to make sterilization of money flows infeasible if fixed rates were implemented today. Although there seemed to have been some scope for at least temporary

sterilization in the 60's [see Obstfeld (1982)], as that decade drew to a close such a policy became increasingly difficult. When the system of fixed rates collapsed, it was clear that the magnitude of private speculative capital flows would be so large that exchange rates that were fundamentally indefensible could not be sustained. For example, in the first hour of trading on May 5, 1971, the Bundesbank purchased more than \$1 billion [Solomon (1982)] before finally giving up and suspending intervention operations. After parities were restored, another dollar crisis developed in early 1973. On March 1, European central banks bought over \$3.6 billion before officially closing their foreign exchange markets. Since 1973, capital markets have continued to develop. Efforts by central bank to intervene against the dollar in early 1985 seemed to have little effect on exchange rates.

The problem with fixed rates goes beyond the likelihood that independent macroeconomic policies could not be pursued in each country. The fear is that capital market flows would force on a country undesirable policy choices. If investors decide that the central bank's commitment to a given parity is not credible, then, in order to defend such a parity the central bank may be forced to pursue highly contractionary policies. Far from leading to a worldwide system of coordinated, stable macroeconomic policies, a system of fixed rates might require divergent and variable macroeconomic policies aimed at heading off speculative attacks.

A system of freely flexible exchange rates is sometimes criticized because the level of the exchange rate can be determined by expectations that are not based in any way on market fundamentals. The exchange market is said to be subject to speculative 'bubbles'. In his essay Cooper describes a bubble as a phenomenon '... in which prices can be rationally pushed beyond their long-run equilibrium values so long as the participants expect the risk of relapse to fall short of the prospect of further gain ... [I]n some periods expectations about the 'fundamentals' may be so weakly held that the rate can be dominated by purely market dynamics for longish periods, measured in weeks or months ... [A]n unnecessary and avoidable element of instability is introduced into national economies.' In a recent work, however, Flood and Garber (1984) have shown that, in a sense, a fixed exchange rate system is equally subject to speculative bubbles. The market can form an opinion that a central bank can no longer sustain a fixed exchange rate, and this opinion may not be based on any market data. Yet, if everyone is convinced the fixed rate will collapse, there will be a speculative attack on the central bank's foreign currency reserves and expectations will be fulfilled.

Triffin's paper addresses a particular reform that he points out has achieved some greater exchange rate stability – the European Monetary System. He states that much progress has been made at curbing real exchange rate variability among member countries, though they have been somewhat less successful in coordinating policy decisions. Triffin's evidence, however, must be considered in light of Rogoff's (1984) conclusions that much of the stability

in the EMS has been achieved by explicitly limiting capital movements through controls. He finds direct evidence (on the difference between onshore and offshore interest rates for the lira and franc), and indirect evidence that capital controls were binding and may explain the reduction in exchange rate fluctuations.

'Target zones' or wide bands in which exchange rates would be allowed to fluctuate were a much discussed cure for the current problems of the international monetary system. Both Cooper and Robert Roosa argue that the logical next step would be to introduce more stability into the system with such zones. It could be said that any fixed exchange rate system is a band proposal. The difference here is one of magnitude – the bands within which exchange rates would be allowed to fluctuate, as envisioned by Cooper and Roosa, would be much wider than those usually associated with 'fixed' parities. It seems that the target zone system is subject to the problems of both the fixed and flexible systems. As exchange rates approach the limits of the zone, the possibility of a speculative attack on the central bank's reserves arises. On the other hand, within the band, the exchange rate will continue to vary more rapidly than nominal goods prices. Indeed, Dornbusch (1983) argues that policies to keep an exchange rate within a band will lead to more volatility of the rates inside the band. If the commitment to maintain the band is credible, then the risk of large exchange rate movements is reduced. A change in the relative rates of returns on assets in the two countries involved will lead to bigger shifts in portfolio composition and, thus, more exchange rate movement. Dornbusch argues that it makes no sense to set limits on exchange rates but not on other macroeconomic variables.

As Jacob Frenkel points out in his remarks on Roosa's essay, the real problem is not the flexible exchange rate system, but the lack of coordination of macroeconomic policy. 'If governments were willing to follow policies consistent with the maintenance of a gold standard, then the gold standard itself would not be necessary; if however, governments are not willing to follow such policies, then the introduction of the gold standard per se will not restore stability since, before long, the standard will have to be abandoned.'

Frenkel does not think it very likely that governments will abandon control over domestic policies. He likens the problem to an oligopoly problem. If everybody cooperates, the group is better off, but each individual country has an incentive to cheat on the agreement. It is not clear whether this analogy is entirely appropriate in this context, because the policy game is more like an infinitely repeated game rather than a one-shot game. In infinite games, an equilibrium might exist in which fear of reprisal enforces something like cooperation. However, these games have many equilibria, and perhaps it is clear that the policy-makers now have not settled on cooperation.

The alternative to explicit policy coordination would be imposition of capital controls. This option was generally treated in the presentations in this volume as something to be avoided, presumably because the long-run costs of

microeconomic inefficiency are perceived to outweigh whatever short-run macroeconomic gains might occur from the controls. Not all economists find the trade-off undesirable. Tobin (1978) has argued that we need to 'throw some sand in the wheels of our excessively efficient international money markets'. He proposes a tax on all spot conversions of one currency into another. Cooper and Aliber each suggest that capital controls are unlikely to be successful simply because people will find a way around them.

A separate argument against capital controls has been advanced by Frankel (1983) and others. The argument simply put is that the real problem facing the U.S. economy and the world economy is the fiscal and monetary mix in the U.S. that has driven up real interest rates. Although the appreciation of the dollar has severely worsened the current deficit, the current account can be viewed as a safety valve that allows the steam from the budget deficit to escape. With no capital inflow from abroad, domestic capital markets would have to absorb the sale of bonds to finance the deficit. Real interest rates would be much higher, and the consequent effect on lowering investment and long-run growth would be more severe. This viewpoint argues that free capital mobility, then, improves from a macroeconomic perspective the outlook following the large government budget deficits.

Cooper proposes that over the next twenty-five years the major industrial countries move toward adopting a common currency. There are clearly advantages to such a plan. Although this system has many of the characteristics of a fixed exchange rate regime, it would seem to avoid some of the problems associated with fixed parities. In the first place, the problem of whether the pledge to maintain the fixed rates is credible all but disappears under Cooper's plan. Secondly, there are no issues involving the adequacy of foreign reserve holdings. The single world currency would act like the ideal textbook fixed exchange rate system. The drawback is that no country would exercise control over its own monetary policy. Thus, the real question about Cooper's plan is whether countries would be willing to make such a sacrifice of policy-making powers.

Perhaps it would be safe to conclude that the participants in this conference agree that the weakness of the monetary arrangements that exist between the industrialized countries is magnified by their current choice of policy mix. Henry Wallich deduces in his essay that the source of the U.S. current account deficit and the appreciation of the dollar in the 80's is capital flows. In particular, budget deficits have pushed up the real return to dollar securities causing foreign investors to be attracted to the dollar. At the same time other countries – Germany in particular – have followed more conservative fiscal policies but allowed easier money, thus accenting the differential in asset returns. It is argued by several participants that in the absence of this divergence of macroeconomic policy, the flexible exchange rate system would be working fine. Conversely, given this difference in the fiscal-monetary mix, only a flexible regime could handle the vast international capital flows.

It is also claimed, by Pedro-Pablo Kuczynski, that the high real interest rates in the U.S. contribute to the Latin American debt problem by increasing the real interest burden for the debtor nations. In addition the U.S. recession has dampened demand for imports from these countries. On the other hand, since most of the debtor countries' currencies do not float relative to the dollar, their current accounts have not benefited from the dollar appreciation. He proposes some intervention in loan markets to ensure that new loans to the debtors be granted at lower than market interest rates.

John Williamson discusses the need to increase liquidity for the developing countries. He believes the current level of international liquidity is not enough to sustain worldwide economic recovery, so he proposes a new allocation of SDR 10 billion. He also recommends the establishment of an SDR clearinghouse to enhance the SDR's use in private transactions.

The essays of Adolfo Diz and Jacques Polak address how the IMF assists the developing countries with debt problems. Diz traces the growth of conditionality at the IMF. He points out that before the Bretton Woods Conference the concept of conditionality was present in many of the proposals for the IMF. It was also implicit in the early years of the program. However, as the scope and size of lending increased, so did conditionality. In the 1970's there sprung up new temporary lending facilities that served effectively to lower the degree of conditionality. Diz observes that at some point in the 70's the trend toward less conditionality was reversed as more and more countries used their upper credit tranches.

Polak describes the eternal dilemma of the IMF in trying to deal with a balance of payments problem for some country as the decision of how much of the imbalance should be financed and how much the IMF should insist on measures of adjustment. Polak points out that in the 1970's many countries turned to commercial banks as a source of financing because the Fund's resources were not adequate. Since 1980, the Fund has increased its role as a lender and as a financial organizer.

Polak does not, however, seriously address the question of why the IMF should play a large role in organizing sources of finance for debtor nations. It has been argued by Eaton and Gersovitz (1983) that the IMF can play a valuable part by gathering potential lenders into a cohesive unit. When lenders are atomistic, no individual lender can offer much threat of retaliation in the event of default by the borrower. This absence of threat hurts the borrower, since lenders will be unwilling to commit much resources without adequate assurance there will be no default. When lenders can act collusively, they can effectively threaten large penalties in the event of default – such as cutting the lender off from all future loans. In the face of such threats, the borrower is unlikely to default – and so is a better credit risk in the eyes of the lenders. Additionally, Eaton and Gersovitz argue, the IMF can play an important role in gathering and providing information to commercial banks on the credit-worthiness of potential borrowers. It has also been argued [Council of

Economic Advisers (1984)] that if the debt problems of the LDCs are transitory rather than structural, an organization such as the IMF has an important function. When a fundamentally solvent borrower suffers temporary liquidity problems, any individual banks might find it in its interest to minimize risk by refusing refinancing to this debtor. However, such action increases the probability of default on loans this borrower has obtained from other banks. There is private market failure because each lender does not adequately consider the full social value of lending another dollar – that is, they do not internalize how their loans lower the probability of default for other lenders. The IMF's task is to organize the commercial banks in order to ensure that refinancing continues in the event of a temporary liquidity crisis. Thus, the IMF would seem to have a role in shoring up weaknesses in the private loan market. The essential unanswered question is how large should that role be? Is the current IMF involvement too large or is it inadequate?

Perhaps a fair summary of this volume is that almost all participants agree that the international monetary system needs reform to cope with the crises of too variable exchange rates and excessive LDC debt. Yet there seems to be no consensus on what should be done. Few new proposals are offered in this volume. The proposals that are most likely to have some positive return – such as greater coordination of macroeconomic policies among the leading industrialized nations – seem unlikely to be implemented in the near future.

## References

- Council of Economic Advisers, 1984, *The annual report* (United States Government Printing Office, Washington, DC).
- Dornbusch, Rudiger, 1983, Flexible exchange rates and interdependence, *IMF Staff Papers* 30, 3–30.
- Eaton, Jonathan and Mark Gersovitz, 1983, Country risk: Economic aspects, in: Richard J. Herring, ed., *Managing international risk* (Cambridge).
- Flood, Robert and Peter Garber, 1984, Collapsing exchange-rate regimes: Some linear examples, *Journal of International Economics* 17, 1–13.
- Frankel, Jeffrey, 1983, The desirability of a dollar appreciation, given a contractionary U.S. monetary policy, NBER working paper no. 1110, April.
- Genberg, Hans, 1978, Purchasing power parity under fixed and flexible exchange rates, *Journal of International Economics* 8, 247–276.
- Obstfeld, Maurice, 1982, Can we sterilize? Theory and evidence, *American Economic Review* 72, 45–50.
- Rogoff, Kenneth, 1984, Can exchange rate predictability be achieved without monetary convergence? Evidence from the EMS, Federal Reserve Board international finance discussion paper no. 245, July.
- Solomon, Robert, 1982, *The international monetary system 1945–1981* (Harper & Row, New York).
- Tobin, James, 1978, A proposal for international monetary reform, *Eastern Economic Journal* 4, 153–159.